PB2ZCTC	APRIL 2012
EFFECTIVE: 1ST APRIL 2012	

Digital 2 Channel Time Clock

User Guide PB2CTC

April 2012

Polypipe

CONTENTS

Overview **03**

1 Battery access and user controls **04**
1.1 Keyboard **04**
1.2 Displays and LED **04**

2 First time installation **04**
2.1 Initial set up **04**
2.2 Setting time and date **04**

3 Channel initiation **05**

4 Selecting a preset programme **05**
4.1 Creating a user defined programme **05**

5 Manual programme override **06**
5.1 Holiday mode **06**
5.2 Off mode & frost protection **06**

6 Hidden installer menu **07**

7 Technical specification **07**

8 Fault diagnosis **07**

9 Pre-set programmes P1 - P9 ..... **08**

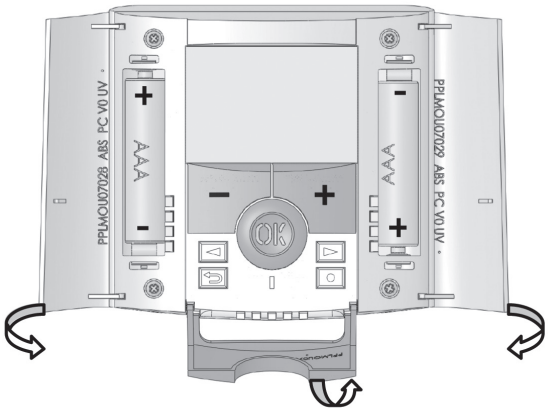
OVERVIEW

The PB2CTC can be used as either a Single Channel or Two Channel Time Clock and is designed to be used with the Master Wiring Centre (PB1ZM).

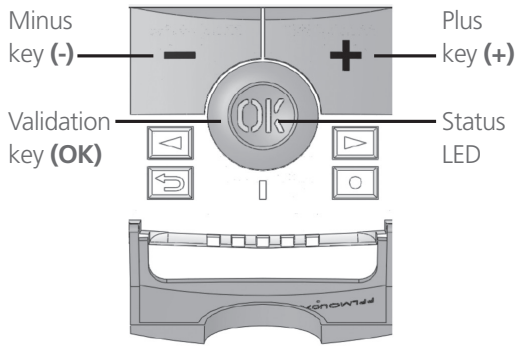
The unit can be used to provide timing control for either two individual underfloor heating manifolds or a mixture of underfloor heating and radiators.

This user guide provides user settings and programming details. These and the advanced settings can also be downloaded from www.ufch.com in A4 format.

1 Battery Access & User Controls



1.1 Keyboard



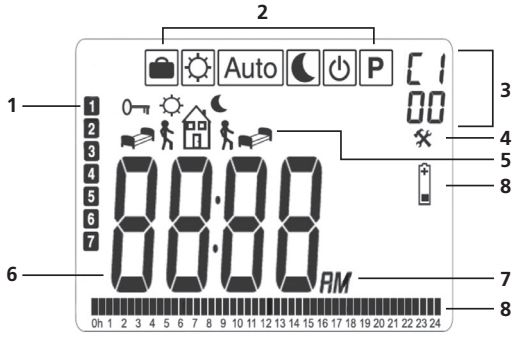
Navigation key left (◄)
Navigation key right (►)
Escape key (⮌)
Program key (●)

1.2 Display & LED

Green flash: Attention
Red flash: Error (batteries, sensor...)

2 First Time Installation

Open the two side covers and Insert the 2 AAA Alkaline supplied batteries (or remove the small protection sticker if the batteries are already installed in the compartment). The unit will display the software version (202) and then default to the main screen.



1 Current day of the week 1 = Monday
2 Operating menu (active mode is framed)
3 Channel assignment number (displays installer/user menu number when this option is chosen)
4 Installer/User menu active
5 Pictogram for programming
6 Time display
7 AM/PM (12 hour clock only)
8 Programme of current days setting

2.1 Initial Setup

When the batteries are first inserted the screen will first display the software version before showing the set up screen.

2.2 Setting the Time and Date

The value to be adjusted will blink, and is adjusted with the keys **(-)** and **(+)**, once the adjustment made, validate it with the **(OK)** key. The thermostat will jump automatically to the next value.

Note: at any time you can return to the previous value by pressing on the escape key (⮌).

Progress of the adjustments:

Time and day:
Hours Setting
Minutes Setting
Day of Week setting (1 = Monday)

Date:
Day Setting
Month Setting
Year Setting

The message **"Save"** with the blinking green LED will be displayed, press **(OK)** to finish and save.

You can access the time and date adjustment mode by pressing the (●) key for 1 second at any time.

3 Channel Initiation

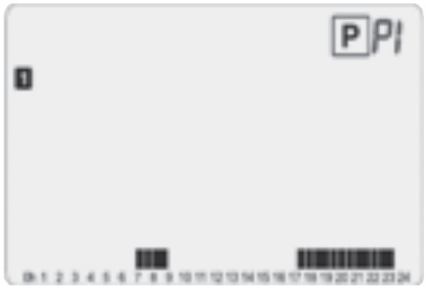
Once the time and date have been entered, the unit will ask you to activate the required number of heating channels by displaying a flashing **Ch1** symbol and the word **YES**. This means that channel 1 is active. To activate the second channel press the **(+)** button to display **Ch2** and using the **(+)** or **(-)** choose either Yes or No. Once you have set the required number of heating channels press the return button (⮌) twice to return to the main display screen.

4 Selecting a Preset Programme P1 to P9

There are 9 preset programmes P1 – P9.

The thermostat will default to P1 (see programmes pages 08 to 09).

To select a preset programme Use the navigation keys to move the cursor from Auto to P.



Press OK to make the P1 /P9 adjustable.

Use the **(-)** or **(+)** Keys to choose **P1 to P9**, or U1 to U4.

Select and validate with OK to return to Auto.

4.1 Creating User Defined Programmes

With U1 to U4 Blinking Press the Programme Key (●) to access programme settings:

- The program creation will always start with the day 1 (Monday).

Once you have pressed the (●) key, the following display will appear.

Adjust the hour of the first step of the program with **(-)** or **(+)**.

Press **(OK)** to validate and jump to the following step.

The Pictogram will blink meaning that you can toggle between:

Choose and press **(OK)** to validate and then adjust the hour of this step with **(-)** or **(+)**,

Press **(OK)** to validate and move to jump to the next step.

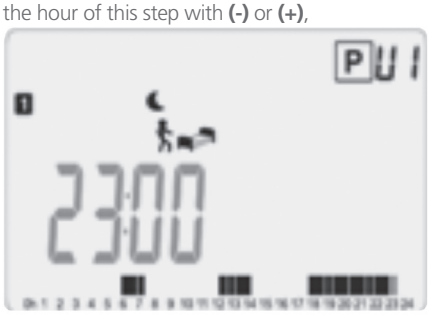
If you selected the option you will automatically be required to select the return time with **(-)** or **(+)**.

Select the return time, press **(OK)** and move to the next step.

The pictogram will blink again meaning that you can toggle between:

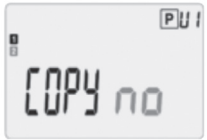
and

Should you wish to have a second "leave and return" during the day. Use the navation Keys to select and Press **(OK)** to validate then adjust the hour of this step with **(-)** or **(+)**,



Press **(OK)** to validate and jump to finish the program setting of day 1 (Monday).

You can now can choose to copy the program just created to subsequent days.



Change the choice **"Yes"** or **"no"** with **(-)** or **(+)** and validate your choice with **(OK)**.

- If you select **"no"**, you will be invited to create a program for Tuesday (repeat the previous steps).

- If you select **"Yes"**, you will have the possibility to copy the program from Tuesday to Wednesday... etc, up to the last day of the week (Sunday).

Press **(OK)** on the last day you will be invited to **"SAVE"** your program.

The following screen with the blinking green LED will be displayed.

Press **(OK)** to save your program and return to the main screen (in **AUTO** mode).

Press the escape key (⮌) to erase and come back to the beginning of the program mode.

Please note that it is possible to use a mixture of pre-set and user defined programmes on separate channels.

5 Manual Programme Override

When operating in the **AUTO** mode the programme times can be overidden temporarily by pressing the **OK** button and using the **(-)** or **(+)** buttons to toggle between (see image 1a & 1b) and confirming by pressing **OK**. When any manual override is made the symbol will be displayed.

To permanently override the programme move the cursor over the symbol for **ON** or to **OFF** by using the symbol.

5.1 Holiday Mode

The Holiday mode allows you to suspend the current user programme for a period of hours or days.

First move the cursor over the symbol and press **OK** then using the **(-)** or **(+)** buttons choose the number of hours or days that you enter and then confirm with **OK**.

The logo will blink and the number of days remaining is displayed until the end of the period.

If you want to stop the holiday function before the end of the duration adjust the day period on "**no**".

5.2 Off Mode/Frost Protection

To switch the unit off move the cursor over the symbol.

In this mode frost protection is automatically provided and a minimum temperature of 7.0°C will be maintained. However, this temperature can be changed by adjusting the value in the hidden installer menu.

6 Hidden Menu

There is a hidden installer menu which can be accessed by pressing and holding a combination of buttons.

The user menu can be used to set a number of user preferences such as a 12 hour or 24 hour clock display. And also used to adjust various operational settings of the unit.

To access this menu set the unit to the ⏻ setting and press and hold the (●) button for 10 seconds.

PB4ZCTC Hidden Installer Menu

Menu No	Display	Description	Default	Option
00	Ch INI	Sets number of required channels	N/A	1 to 4 Channels
01	dEG	Change temp display between degC or degF	Deg C	Deg F
02	Time 24H	Change between 12H or 24H clock display	24H	12H
03	dSt Yes	Automated clock change for Daylight Saving Time	YES	No
05	AirS	Current room temperature	N/A	None
06	AirC	Air temperature calibration	N/A	None
07	SENS Err	No remote sensor detected	N/A	Function not active
08	SENC	Remote sensor calibration	N/A	Function not active
09	HG 10.0	Frost protection setting	10 degC	0.05 degC to 10.0 degC
10	Clr ALL	Restores factory settings	N/A	Press & hold OK
11	CLh4	Software version	N/A	None
12	End	Returns display to Main Screen	N/A	Press OK

7 Technical Specification

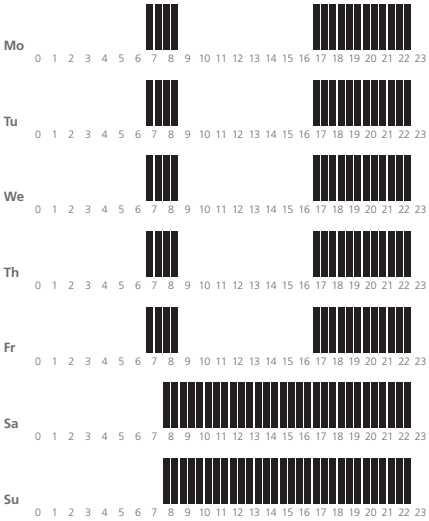
Measured Temperature Precision:	N/A
Environmental Operating Temperature: Shipping and Storage Temperature:	 0°C - 40°C -10°C to +50°C
Setting Temperature Range Anti freeze/OFF: Holiday: Timer:	 7°C 0.5°C to 20°C 5°C to 35°C
Regulation Characteristics:	N/A
Electrical Protection:	Class II - IP30
Power Supply: **Operating Life:**	2 AAA LR03 1.5V Alkaline 2 Years
Output:	N/A
Optional External Sensor:	N/A

8 Fault Diagnostics

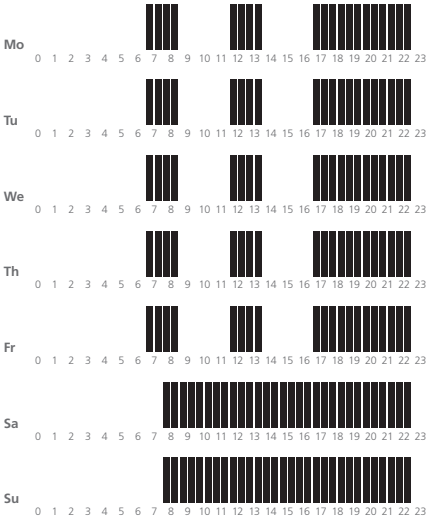
My thermostat doesn't start	
Battery Problem	- Check if the protection sticker on the batteries is removed. - Check the batteries orientation. - Check the charge of the batteries.
My thermostat LED, blinks in red	
Problem on Sensors	The logo blinks (ambient sensor) - Contact your installer. The logo blinks (floor sensor). - Check the connection of the sensor. - Disconnect the sensor, and check it with an ohmmeter (the value must be around 10kohms).
Battery level is low	The logo blinks (batteries) - Replace the batteries.
My thermostat seems work correctly but the temperature in the room was never in accordance with the program	
Program	- Check the clock. - Check the difference between Comfort and Setback temperature is not too high? - Contact your installer, to check and adjust the calibration.

9 Pre-set Programs

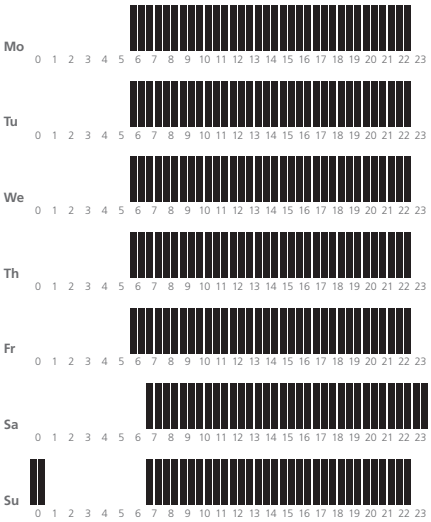
P1 Morning, Evening & Weekend



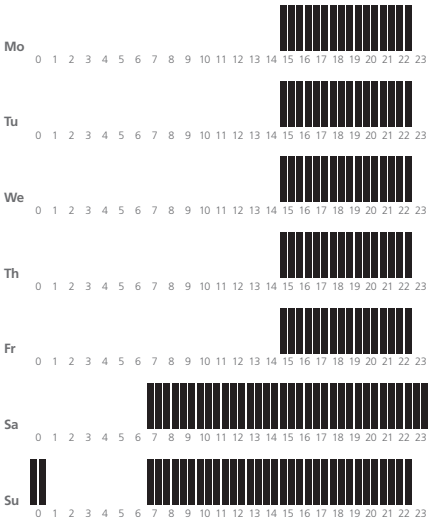
P2 Morning, Midday, Evening & Weekend



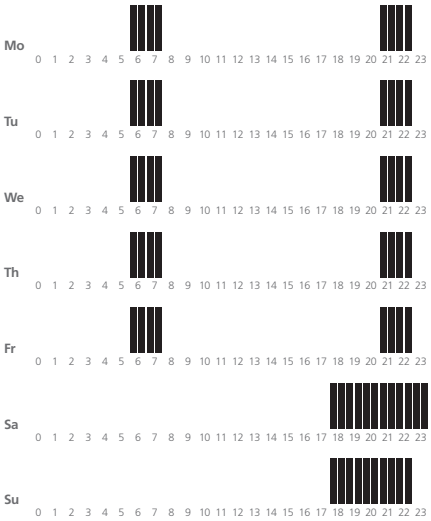
P3 Day & Weekend



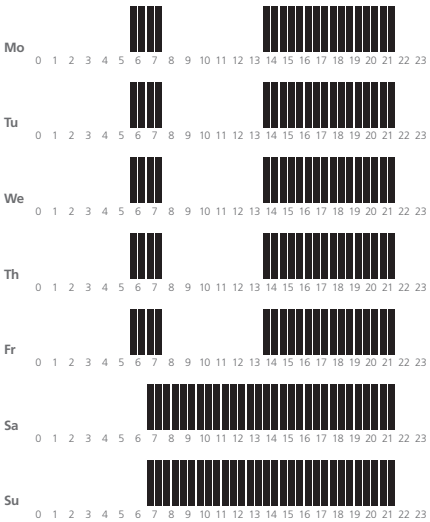
P4 Evening & Weekend



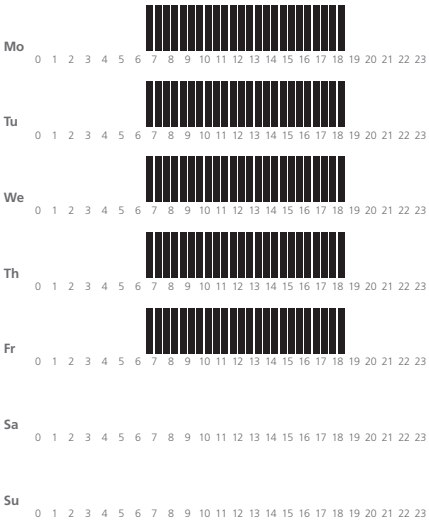
P5 Morning, Evening (Bathroom)



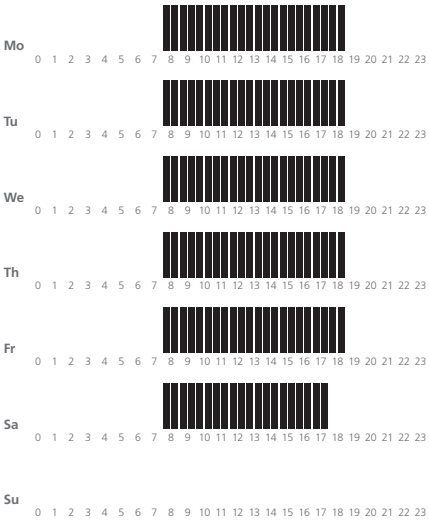
P6 Morning, Afternoon & Weekend



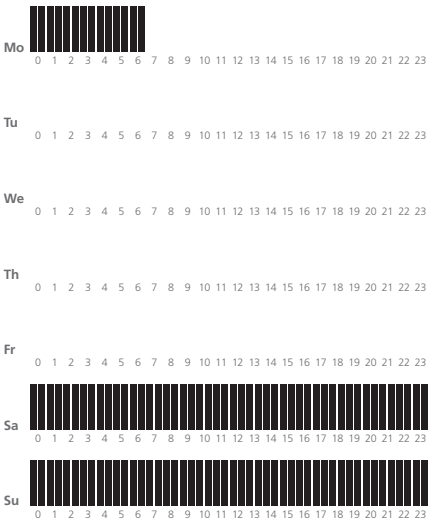
P7 7H - 19H (Office)



P8 8H - 19H * Saturday (Shop)



P9 Weekend (second house)



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